

What is claimed is:

1. A building having air supply and return ducts comprising:

at least one room for providing a human life sustaining atmosphere in the face a harmful airborne agent attack against said building, wherein said room includes

an oxygen source,

a carbon dioxide scrubber, and

wherein said room is substantially sealed off from said air return and supply ducts, and wherein gaseous oxygen is added to said room atmosphere by said oxygen source and gaseous carbon dioxide is removed from said room atmosphere by said carbon dioxide scrubber.

2. A building as recited in claim 1, wherein said oxygen source is a gaseous oxygen generator.

3. A building as recited in claim 2, wherein said oxygen generator includes an exhaust tube and said exhaust tube has a terminal free end outside of said room.

4. A building as recited in claim 3, wherein said room has a plumbing fixture having a water trap and said oxygen generator exhaust tube exits said room through said water trap.

5. A building as recited in claim 1, wherein said oxygen source includes a chemical oxygen source.

6. A building as recited in claim 5, wherein said chemical source includes a chemical compound which generates gaseous oxygen in the presence of water.

7. A building as recited in claim 1, wherein a chemical air revitalization compound serves as both said oxygen source and said carbon dioxide scrubber.

8. A building as recited in claim 7, wherein said air revitalization compound includes potassium superperoxide.

9. A method for providing a human life sustaining atmosphere in a room during a harmful agent attack comprising the steps of:

providing means for removing gaseous carbon dioxide from air;

providing means for generating gaseous oxygen;

providing means for sealing said room from any externally coupled ventilation sources;

sealing said room from any externally coupled ventilation sources using said sealing means;

removing some of said carbon dioxide from said room air using said carbon dioxide removing means; and

generating oxygen using said oxygen generating means.

10. A method for providing a human life sustaining atmosphere in a room during a harmful agent attack comprising the steps of:

providing a carbon dioxide scrubber;

providing a gaseous oxygen source;

providing sealing devices for sealing said room from any externally coupled ventilation sources;

sealing said room from any externally coupled ventilation sources using said sealing devices;

removing some of said carbon dioxide from said room air using said carbon dioxide scrubber; and

supplying oxygen to said room using said oxygen source.

11. A method as recited in claim 10, wherein said oxygen source is an oxygen generator and said oxygen supplying step includes generating said oxygen.

12. A method as recited in claim 11, wherein said oxygen generator is a chemical oxygen generator.

13. A method as recited in claim 10, wherein said oxygen generator is an electrical oxygen generator and said oxygen supplying step includes generating said oxygen using electrolysis of water.

14. A method as recited in claim 13, wherein said electrolysis produces a hydrogen gas, further comprising providing a hydrogen adsorption device for adsorbing said hydrogen gas and adsorbing said hydrogen gas using said adsorption device

15. A method as recited in claim 14, wherein said hydrogen absorption device includes a metal hydride and said hydrogen gas absorption step includes passing said hydrogen gas over said metal hydride.

16. A method as recited in claim 13, further comprising providing an exhaust conduit from said room and venting hydrogen gas produced by said electrolysis from said room.

17. A method as recited in claim 16, wherein said exhaust conduit is a tube inserted into a plumbing stack from said room and said venting step includes venting said hydrogen gas into said plumbing stack.

18. A method as recited in claim 17, wherein said plumbing stack is separated from said room by a water trap and said exhaust conduit extends from said room through said water trap and into said stack, wherein said venting step includes venting said hydrogen out of said room through said water trap.

19. A method as recited in claim 18, wherein said water trap is located in a plumbing fixture selected from the group consisting of sinks, bathtubs, shower stalls, and toilets, and said venting step includes venting said hydrogen through said plumbing fixture.

20. A method as recited in claim 10, wherein said sealing step includes sealing air supply ducts and air return ducts.

21. A method as recited in claim 13, wherein said electrical oxygen generator is supplied with electricity from an electrical source external to said room.

22. A method as recited in claim 21, wherein said electrical generator is driven by an internal combustion engine and said electricity is supplied through a cable fed into said room.

23. A method as recited in claim 21, wherein said generator is a fuel cell and said electricity is supplied through a cable fed into said room.

24. A method as recited in claim 10, wherein said sealing step includes inflating gas-filled bladders in air ducts coupled to said room.

25. A method as recited in claim 10, further comprising providing at least one personal supply tube for coupling to said oxygen source, said personal supply tube having at least two opposed ends, wherein said oxygen supplying step includes coupling a first end of said oxygen supply tube to said oxygen source and placing a second end of said oxygen supply tube near a human face.

26. A kit for providing a breathable room atmosphere comprising:  
at least one portable sealing device for sealing said room from any coupled ventilation ducts;  
a portable carbon dioxide scrubber; and  
a portable gaseous oxygen source.
27. A kit as recited in claim 26, wherein said sealing device is selected from the group consisting of inflatable gas bladders, polymeric foam generators, and sealing tape.
28. A kit as recited in claim 26, wherein said gaseous oxygen source includes an electrolytic oxygen generator.
29. A kit as recited in claim 26, wherein said gaseous oxygen source includes an oxygen generator having an exhaust tube adapted to be inserted through an existing plumbing water trap.
30. A kit as recited in claim 26, wherein said gaseous oxygen generator includes a solid material which generates gaseous oxygen upon contact with water.
31. A kit as recited in claim 26, wherein a chemical air-revitalizing compound serves as both said gaseous oxygen generator and said carbon dioxide scrubber.